CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

AMENDED COMPLAINT NO. R2-2006-0011
FOR
ADMINISTRATIVE CIVIL LIABILITY
IN THE MATTER OF
CARGILL, INCORPORATED
7220 CENTRAL AVENUE,
NEWARK, ALAMEDA COUNTY

The Executive Officer of the California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter, the Water Board), hereby gives notice that:

- 1. Cargill, Incorporated (the Discharger) has violated provisions of law for which the Water Board may impose civil liability pursuant to California Water Code (CWC) Sections 13385(a)(2) and (a)(4) and 13323.
- 2. The Discharger violated its National Pollutant Discharge Elimination System (NPDES) permit issued by the State Water Resources Control Board for Storm Water Discharges Associated with Industrial Activities, Water Quality Order No. 97-03-DWQ (General Permit) by discharging bittern into waters of the United States. The General Permit requires that, except as allowed in Special Conditions of the General Permit, the discharge of materials other than storm water either directly or indirectly to waters of the United States is prohibited, and that the discharge of any prohibited non-storm water discharges must be either eliminated or permitted by a separate NPDES permit. The Discharger has had coverage of its facility under the General Permit since April 1, 1992 (WDID No. 2 01 I 002740).
- 3. The Discharger also violated the Water Board's Water Quality Control Plan (Basin Plan), Prohibition 17, by discharging bittern into waters of the United States.
- 4. Unless waived, a hearing on this Complaint will be held before the Water Board on August 9, 2006 at the Elihu M. Harris State Building, First Floor Auditorium, 1515 Clay Street, Oakland, California. The Discharger or its representative will have an opportunity to be heard and contest the allegations in this Complaint and the imposition of the civil liability.
- 5. At the hearing, the Water Board will consider whether to affirm, reject, or modify the proposed civil liability, or to refer the matter to the Attorney General for recovery of judicial liability.

ALLEGATIONS

This Complaint is based on the following facts:

6. The Discharger operates various salt evaporation ponds along the Bay front in Newark, Alameda County, including the salt-making and processing facility at 7220 Central Avenue in Newark. The facility is subject to the General Permit because industrial activities subject to the

General Permit are conducted there, and the facility has exposure of industrial processes, materials, and products to storm water. After sodium chloride is harvested from the ponds, the denser, magnesium-potassium rich salt solution remaining is called *bittern*. Bittern is a pollutant under the federal Clean Water Act and a waste under state law. Bittern is hypersaline, with a salinity of over 350 parts per thousand (ppt), compared to ocean salinity of 35 ppt. Therefore, if released to the environment, bittern contains constituents that are considered pollutants under the Clean Water Act and a waste under California's Porter-Cologne Water Quality Control Act. The Discharger's bittern is stored in two large ponds, known as Pond 12 and Pond 13. In order to keep the bittern from overflowing from the ponds to the Bay, the Discharger has identified opportunities for its re-use. Bittern is a commercial product routinely sold to customers for various uses, including use as a dust control product for dirt and gravel roads and as a road de-icer.

- 7. The Discharger researched the toxicity of its bittern and reported the information to the Water Board in 1993 and 1994. In technical reports submitted to the Water Board ("Cargill Napa Disposal Evaluation Study Toxicity Tests," prepared by S.R. Hansen & Associates, and dated October 5, 1993 (2), October 12, 1993, January 25, 1994 (2), and February 25, 1994), the Discharger found that bittern is highly toxic to estuarine aquatic organisms, and exhibited toxicity at dilution ratios of up to 100:1 (baywater: bittern). This degree of toxicity is confirmed in a summary of acute and chronic toxicity test results published in 2002 ("South Bay Salt Pond Restoration: Feasibility Analysis," authored by Stuart W. Siegel and Philip A.M. Bachand, 2002, pp. 53-54).
- 8. On June 1, 2005, the Discharger had a bittern release at its facility, particularly at the railcar loading station. At the time of the discharge, rail tanker cars were being cleaned out and prepared for reuse. On May 31, 2005, the Discharger had received 11 railcars to fill from the railroad. On June 1, incorrectly assuming every car was empty, the operator opened the bottom valve on the car involved in the discharge. After noting that no liquid or solids were immediately draining from the car, the operator left the loading station without visually inspecting the railcar interior to determine if it contained anything. While the operator was away, bittern solids that had temporarily blocked the valve opening were dislodged and the bittern discharged into the rail loading facility's secondary containment. The volume of bittern from the car, approximately 17,650 gallons, overwhelmed the containment area and approximately 7,100 gallons of bittern discharged onto an adjacent road and then into waters of the United States and State. The Discharger discovered bittern discharging from the secondary containment into a sump and then spilling over onto an adjacent dirt road. From the road, the bittern discharged into the adjacent salt marsh wetlands, and likely into Barge Canal, Newark Slough, and finally to South San Francisco Bay. The chronology of events is as follows:

May 31, 2005: Discharger receives 11 rail tanker cars from the railroad, including one rail tanker car containing approximately 17,650 gallons of bittern.

June 1, 2005: Discharger's employee opens valve at bottom of the railcar at bittern loading facility. Discharger's employee does not visually inspect interior of railcar prior to or after opening the valve at the bottom of the railcar.

June 1, 2005: Discharger's employee leaves railcar washing area, incorrectly assuming that all eleven railcars are empty.

June 1, 2005: One railcar releases through its open valve and releases a total of about 17,650 gallons of bittern. 10,550 gallons of bittern are discharged into the containment area and approximately 1,650 of those gallons of bittern are pumped back into the Discharger's bittern pond while the discharge is occurring. An estimated additional 7,100 gallons are discharged into the adjacent wetlands, tidal channels, the Barge Canal/Newark Slough, and South San Francisco Bay.

June 1, 2005: Appropriate agencies are notified and emergency action begins; a sump pump removes bittern from containment area, all visibly impacted soils are removed, an existing dirt berm is reinforced to prevent run-off, and a vacuum truck removes any bittern still remaining and traceable.

June 1, 2005: Sampling begins in the high marsh and in the marsh channels adjacent to the railcar loading facility, and results show baume readings as high as 35.3, or approximately equivalent to 370 parts per thousand (ppt) (linear extrapolation of baume to salinity conversion, based on Cargill Conversion Table), as compared to typical Bay water salinities of 5 to 32 ppt (0.5 - 3.2%). The Discharger then begins sampling in areas immediately adjacent to the dirt road and in the high marsh area the day after the spill was discovered. Due to the coincidence of the evening tide and sunset, the Discharger cannot begin sampling in the adjacent Barge Canal and Newark Slough.

June 2-7, 2005: Sampling continues on each day and the results are tabulated and sent to the Water Board. Six of 14 samples tested the first day had concentrations of bittern (greater than 155 ppt or 14.7% salinity), indicating bittern discharge to the high marsh and marsh channels adjacent to the railcar loading facility. Sampling in the Barge Canal and Newark Slough begins on June 2, 2005 and no detectable elevated salinity is found.

PROPOSED CIVIL LIABILITY

9. The General Permit contains a discharge prohibition that states as follows:

"Except as allowed in Special Conditions (D.1) of this General Permit, materials other than storm water (non storm water discharges) that discharge either directly or indirectly to waters of the United States are prohibited. Prohibited non-storm water discharges must be either eliminated or permitted by a separate NPDES permit."

The Discharger violated this discharge prohibition by discharging 7,100 gallons of bittern (non-storm water) into waters of the United States, particularly a salt marsh wetland, Barge Canal, Newark Slough and South San Francisco Bay. Such discharge is not allowed for in the Special Conditions of the General Permit. Nor was the discharge permitted by a separate NPDES permit. The discharge of 7,100 gallons of bittern into waters of the United States occurred on one day.

10. The Basin Plan contains a discharge prohibition (Prohibition 17) that prohibits the discharge of

"[w]aste so as to alter the total dissolved solids or salinity of waters of the state to adversely affect beneficial uses, particularly fish migration and estuarine habitat." The Discharger's discharge of 7,100 gallons of bittern elevated the salinity of the receiving waters to as much as 370 ppt as described above (5 to 32 ppt is average). Such highly saline waters adversely affect beneficial uses. It also affected the total dissolved solids concentrations of the receiving water and likely resulted in direct estuarine habitat losses due to the high toxicity of the bittern discharge.

11. CWC Section 13385(a) provides, among other things, that any person who violates any waste discharge requirements, such as the General Permit, or a Basin Plan prohibition shall be civilly liable. Under CWC Section 13385(c), civil liability may be imposed administratively in an amount not to exceed the sum of (1) \$10,000 for each day in which the violation occurs and (2) when there is a discharge, any portion of which is not susceptible to cleanup or is not cleaned up in excess of 1,000 gallons, an additional liability not to exceed \$10 per gallon of volume discharged but not cleaned up exceeds 1,000 gallons.

The Discharger violated the General Permit's prohibition against non-stormwater discharges for one day. The Discharger also violated the Basin Plan's Prohibition 17 for one day. The maximum possible civil liability for each of these violations is \$10,000, for a total of \$20,000. Additionally, 7,100 gallons were discharged and not cleaned up for which a maximum civil liability of \$61,000 may be imposed. As such, the Water Board may administratively impose civil liability up to \$81,000 for the discharge described in the Findings above.

- 12. Pursuant to California Water Code Section 13327 and 13385(e), the Water Board must consider the following factors in determining the amount of civil liability: "the nature, circumstance, extent, and gravity of the violation or violations, whether the discharge is susceptible to cleanup or abatement, the degree of toxicity of the discharge, and, with respect to the violator, the ability to pay, the effect on ability to continue in business, any voluntary cleanup efforts undertaken, any prior history of violations, the degree of culpability, economic benefit or savings, if any, resulting from the violation, and other matters that justice may require."
 - a. Nature and Circumstances of the Violations:

The nature and circumstances of these violations are described in the Findings above.

b. Extent and Gravity of the Violations:

The Discharger discharged bittern at a concentration that is chronically and acutely toxic to estuarine organisms into waters of the United States and created a condition of pollution.

Discharges from the spill caused adverse impacts to water quality within the marsh adjacent to the Discharger's facility and may have caused adverse impacts to the Barge Canal, Newark Slough and San Francisco Bay. The highest concentration of bittern reported within waters of the State was approximately 370 ppt (by linear extrapolation from Cargill's Conversion Table), or 35.3%, at the time of the discharge. Typical bay water salinities vary between 5 and 32 ppt, or 0.5-3.2%.

In addition to the impacts described in the Findings above, dense, hypersaline discharges of bittern to shallow receiving waters, such as the South San Francisco Bay, have the greatest impact during late spring and summer months when mixing forces are less. Because bittern is significantly denser than estuarine water, these discharges are expected to sink to the bottom with minimal initial mixing and adversely affect bottom-dwelling organisms.

Observable bittern effects to subtidal areas within the slough are unknown; however, the Discharger observed bittern concentrations in the adjacent wetlands and tidal channels that were above concentrations that have been demonstrated to cause acute and chronic toxicity in laboratory tests conducted by the Discharger.

c. Susceptibility to Cleanup or Abatement.

Once bittern is released into sloughs or wetlands, it is generally not susceptible to cleanup due to both the nature of the material, a liquid waste more dense than Bay water, and its location within the Bay.

d. Toxicity of the Discharges.

Specific data on the bittern discharge that occurred on June 1, 2005, does not exist; however, discharges of undiluted bittern are highly toxic to aquatic organisms mostly due to the unnatural ionic balance of the water. The Discharger's bittern has been shown to cause acute and chronic toxicity at the concentrations reported in this release.

e. Economic Benefit or Savings Resulting From the Violations.

The Discharger has realized an economic benefit from its delay in implementing BMPs, such as improving its existing secondary containment at the railcar loading facility to mitigate the likelihood of a spill. This economic benefit is limited and can be recovered as allowed under an administrative civil liability action.

f. Ability to Pay and the Effect on the Ability to Continue in Business.

The Discharger had revenue of \$71 billion with net earnings of \$2.1 billion for the 2005 fiscal year (taken from the Discharger's website, Cargill.com). The Discharger therefore likely can pay the proposed civil liability, and it will not likely affect its ability to continue in business.

g. Voluntary Cleanup Efforts Undertaken.

The Discharger initiated corrective action as described above.

h. Degree of Culpability.

The Discharger is culpable for violating the General Permit. The Discharger has experienced other bittern discharges within the previous five years. The Discharger did not take the requisite precautions to prevent the discharges of bittern from its pond or its loading area. Precautions could have included having effectively sized secondary containment, visually inspecting the interior of the railcar prior to opening the valve that would allow the car's contents to discharge, remaining present at the car after opening the valve and prior to doing a visual inspection, and updating its Stormwater Pollution Prevention Plan (SWPPP) to include effective Best Management Practices (BMPs), such as those described immediately above, and fully implementing those BMPs at the facility.

In addition, the two earlier releases of bittern that occurred in 2000 and 2002, as described in the Findings, should have alerted the Discharger that the Discharger's bittern handling and loading operations could result in discharges to waters of the United States and that deleterious effects could occur to the surrounding environment in the event of a bittern release. These releases should have triggered a comprehensive review and updating of bittern handling procedures related to bittern loading and unloading.

i. Prior History Of Violations.

Before the June 2005 spill, the Discharger had two known recent discharges of bittern in violation of the General Permit at this site. These discharges also violated Basin Plan Prohibition 17. A bittern discharge of 36,900 gallons occurred in September 2002 and a bittern discharge of 1,000 gallons occurred on February 25, 2000.

On February 25, 2000, the Discharger's bittern rail car loading facility had a bittern release when vandalism resulted in the discharge of an estimated 3,000 gallons of bittern. Of this discharge, 2,000 gallons were captured by the rail car loading facility's secondary containment, and approximately 1,000 gallons were discharged to the adjacent salt marsh, the Barge Canal, Newark Slough, and South San Francisco Bay.

On September 17, 2002, one of the Discharger's employees noticed white foam on the Barge Canal near one of the Discharger's two bittern ponds. The foam indicated a release of bittern from one of the ponds. An uncapped abandoned pipe had allowed bittern to overflow from the pond. This pipe had once connected the two bittern ponds; however, in early 2002, the Discharger's contractor, presumably as part of a maintenance operation, cut the connecting pipe and left uncapped one end of the pipe within one of the bittern ponds.

When the bittern pond was being filled during September 2002, the bittern overflowed through the cut, uncapped pipeline and discharged untreated into the Barge Canal. The Barge Canal is tributary to tidal Newark Slough, which is directly connected to South San Francisco Bay. Approximately 36,900 gallons of bittern discharged to the Barge Canal, Newark Slough, and South San Francisco Bay.

The Discharger has been diligent in both reporting and responding to releases.

j. Other Matters as Justice May Require.

Staff time to prepare this complaint and supporting information is estimated at 110 hours. Based on an average cost to the State of \$100 per hour, the total cost is \$11,000.

- 13. After consideration of these factors as set forth above, the Executive Officer proposes that civil liability be imposed pursuant to CWC Section 13385(c), on the Discharger in the amount of \$71,000 for the violations cited above. The \$71,000 proposed liability includes a \$5,000 civil liability for violating the Basin Plan Prohibition and \$5,000 civil liability for violating the General Permit and \$61,000 for the discharge of bittern that was not cleaned up in excess of 1,000 gallons. The \$61,000 civil liability for the volume discharge is the statutory maximum of \$10 per gallon.
- 14. Issuance of this Complaint is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Section 15321(a)(2), Title 14, California Code of Regulations.
- 15. The Discharger can waive its right to a hearing to contest the allegations contained in this Complaint by (a) paying the civil liability in full or (b) undertaking an approved supplemental environmental project in an amount not to exceed \$43,000 and paying the remainder of the civil liability, all in accordance with the procedures and limitations set forth in the attached waiver.

June 30, 2006

Date

Bruce H. Wolfe

Executive Officer

Attachments: Waiver

WAIVER

If you waive your right to a hearing, the matter will be included on the agenda of a Water Board meeting but there will be no hearing on the matter, unless a) the Water Board staff receives significant public comment during the comment period, or b) the Water Board determines it will hold a hearing because it finds that new and significant information has been presented at the meeting that could not have been submitted during the public comment period. If you waive your right to a hearing but the Water Board holds a hearing under either of the above circumstances, you will have a right to testify at the hearing notwithstanding your waiver. Your signed waiver is due no later than 5 p.m., July 26, 2006.

- Waiver of the right to a hearing and agreement to make payment in full.

 By checking the box, I agree to waive my right to a hearing before the Water Board with regard to the violations alleged in Complaint No. R2-2006-0011 and to remit the full penalty payment to the State Water Pollution Cleanup and Abatement Account, c/o Regional Water Quality Control Board at 1515 Clay Street, Oakland, CA 94612, within 30 days after the Water Board meeting for which this matter is placed on the agenda. I understand that I am giving up my right to be heard, and to argue against the allegations made by the Executive Officer in this Complaint, and against the imposition of, or the amount of, the civil liability proposed unless the Water Board holds a hearing under either of the circumstances described above. If the Water Board holds such a hearing and imposes a civil liability, such amount shall be due 30 days from the date the Water Board adopts the order imposing the liability.
- Waiver of right to a hearing and agree to make payment and undertake an SEP. By checking the box, I agree to waive my right to a hearing before the Water Board with regard to the violations alleged in Complaint No. R2-2006-0011, and to complete a supplemental environmental project (SEP) in lieu of the suspended liability of up to \$43,000, and paying the balance of the fine to the State Water Pollution Cleanup and Abatement Account (CAA) within 30 days after the Water Board meeting for which this matter is placed on the agenda. The SEP proposal shall be submitted to the Executive Officer no later than 30 days from the date of the ACL Complaint. I understand that the SEP proposal shall conform to the requirements specified in Section IX of the Water Quality Enforcement Policy, which was adopted by the State Water Resources Control Board on February 19, 2002, and be subject to approval by the Executive Officer. If the SEP proposal is not acceptable to the Executive Officer, I agree to pay the suspended penalty amount within 30 days of the date of the letter from the Executive Officer rejecting the proposed SEP. I also understand that I am giving up my right to argue against the allegations made by the Executive Officer in the Complaint, and against the imposition of, or the amount of, the civil liability proposed unless the Water Board holds a hearing under

either of the circumstances described above. If the Water Board holds such a hearing and imposes a civil liability, such amount shall be due 30 days from the date the Water Board adopts the order imposing the liability. I further agree to satisfactorily complete the approved SEP within a time schedule set by the Executive Officer. I understand failure to adequately complete the approved SEP will require immediate payment of the suspended liability to the CAA.

Name (print)		Signature	
			*
Date		Title/Organization	n

California Regional Water Quality Control Board



San Francisco Bay Region

1515 Clay Street, Suite 1400, Oakland, California 94612 (510) 622-2300 • Fax (510) 622-2460 http://www.waterboards.ca.gov/sanfranciscobay



June 30, 2006

NOTICE OF PUBLIC HEARING TO CONSIDER AMENDED ADMINISTRATIVE CIVIL LIABILITY FOR CARGILL, INCORPORATED 7220 CENTRAL AVENUE NEWARK ALAMEDA COUNTY

The San Francisco Bay Regional Water Quality Control Board (Water Board) Executive Officer has issued an amended administrative civil liability complaint (Complaint) proposing a civil liability of \$71,000 against Cargill, Incorporated (Discharger) for violating its industrial stormwater permit and the Water Quality Control Plan's prohibition against discharges altering the salinity of receiving waters. The Water Board will hold a hearing on the Complaint as follows:

Date and Time:

August 9, 2006, 9:00 a.m.

Place:

State of California Building, 1st-floor Auditorium,

1515 Clay Street, Oakland CA 94612

No hearing will take place on July 12, 2006 as originally scheduled.

No hearing will be held if Discharger waives its right to a hearing and agrees to pay the proposed civil liability as set forth in the Complaint, provided no significant public comments are received during the public comment period. At the hearing, the Water Board may affirm, reject, or modify the proposed civil liability, or refer the matter to the Attorney General for judicial enforcement.

Hearing Procedures

A copy of the procedures governing an adjudicatory hearing before the Water Board may be found at Title 23 of the California Code of Regulations, § 648 et seq. Except as provided in these regulations, Chapter 5 of the Administrative Procedures Act (commencing with § 11500 of the Government Code) does not apply to adjudicatory hearings before the Water Board.

Any persons objecting to the hearing procedures set forth herein must do so in writing by July 5, 2006, to the contact listed below.

California Environmental Protection Agency



Hearing Participation

Other than prosecutorial staff, participants at the hearing are either designated as "parties" or "interested persons." Designated parties to the hearing may present evidence and cross-examine witnesses. Designated parties are subject to cross-examination. Interested persons may present non-evidentiary policy statements, and are not subject to cross-examination. Interested persons may not cross-examine parties, but may be asked to respond to clarifying questions.

The following participants are hereby designated as parties at the hearing:

Cargill, Incorporated

To ensure that all participants have an opportunity to participate in the hearing, the following time limits shall apply: prosecutorial staff and Discharger shall each have 30 minutes to testify, present evidence, and cross-examine witnesses, and each interested person shall have 3 minutes to present a non-evidentiary policy statement.

Prosecutorial staff will be represented by legal counsel Ms. Yuri Won, who normally advises the Water Board.

Written Comment and Evidence Deadline

All designated parties and interested parties shall submit in writing fourteen (14) copies of any and all comments and evidence concerning the Complaint or to be offered at the hearing no later than 5 p.m. on July 31, 2006, to Mr. Vic Pal at 1515 Clay Street, Suite 1400, Oakland, CA 94612.

Questions

Questions concerning this matter may be addressed to prosecutorial staff Mr. Vic Pal at 510-622-2403 or <u>vpal@waterboards.ca.gov</u>.

Evidentiary Documents and File

The Complaint and related documents are on file, and may be inspected or copied at the Water Board's offices during weekdays between 8:00 a.m. and 5:00 p.m. The Complaint is also available on the Board's website at www.waterboards.ca.gov/sanfranciscobay.

California Environmental Protection Agency

